HENNY PENNY®
Global Foodservice Solutions

Henny Penny
Blast Chiller/Freezer
Models BCF-24/65/110
BCM-110

TECHNICAL MANUAL

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FM06-023
Revised 08-03-06

SECTION 1. TROUBLESHOOTING

1-1. INTRODUCTION

This section provides troubleshooting information in the form of an easy-to-read table.

If a problem occurs during the first operation of a cabinet, recheck the installation per the Installation Section of the Operator's Manual.

Before troubleshooting, always recheck the operation procedures in the Operator's Manual.

1-2. SAFETY

Where information is of particular importance or is safety related, the words NOTICE, CAUTION, or WARNING are used. Their usage is described below.



SAFETY ALERT SYMBOL is used with DANGER, WARNING, or CAUTION which indicates a personal injury type hazard.

NOTICE

NOTICE is used to highlight especially important information.

CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

⚠ CAUTION

CAUTION used with the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

⚠ WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

1-3. TROUBLESHOOTING

To isolate a malfunction, proceed as follows:

1. Clearly define the problem or symptom and when it occurs.
2. Locate the problem in the troubleshooting table.
3. Review all possible causes. Then, one at a time work through the list of corrections until problem is solved.

⚠ WARNING

If maintenance procedures are not followed correctly, injuries and/or property damage could result.

1-3. TROUBLESHOOTING (Continued)

Problem	Cause	Correction
The evaporator is iced-up after a De-icing Cycle	Faulty de-icing heater	Replace de-icing heater
	Evaporator temperature at end of De-icing Cycle too low	Increase the setting of step 8, in Programming Section of Operator's Manual
	Maximum time of De-icing Cycle too short	Increase the setting of step 7, in Programming Section of Operator's Manual
Too much water on evaporator fins	The unit has been shut down without a De-icing Cycle	Start a De-icing Cycle
Slow to decrease in temperature (decline in performance)	Compressor not working properly	Check compressor and re-place if necessary
	Evaporator fan not working properly	Check the fan and replace if necessary
	Temperature of room too high	Ventilate the room
	Not enough clearance around unit	Relocate the unit; see Location Section of the Operator's Manual

1-3. TROUBLESHOOTING (Continued)

Problem	Cause	Correction
Slow to decrease in temperature (decline in performance)	Condenser obstructed by dirt	Clean the condenser
	Evaporator iced up	Perform a De-icing Cycle
	Refrigerating problem	Check refrigeration circuit and components
Display temperature does not match the actual inlet air temperature (No alarm)	In Frigiprobe Mode, the display shows the product temperature	Normal
	In timer mode, or hold mode, the probe may be showing the wrong temperature	Ohm out the probe and check the reading with the table located in this section; change the probe if it is out of tolerance
Green compressor indicator light on and the compressor not working, or working sometimes	Compressor and condenser fan do not work: - Faulty contactor	Check contactor and change if necessary
	- Faulty control board relay-no voltage across terminals 10-11	Replace control board
	Compressor works, but condenser fan does not: - Faulty condenser fan	Replace fan
	Compressor and condenser fan work together: - Faulty protection component for the compressor (overload protector, potential relay, start and run capacitor)	Check items and replace if necessary
	- Faulty overload protector of condenser fan	Check fan and replace if necessary

1-3. TROUBLESHOOTING (Continued)

Problem	Cause	Correction
Green compressor indicator light off and compressor is working	Voltage across terminals 10-11 of control board: - Control board relay bad	Replace control board
	No voltage across terminals 10-11 of control board: - Faulty contactor	Replace contactor
Green fan indicator light on and fan(s) not working	Voltage across terminals 8-9 of control board. - Fan or capacitor bad	Replace fan or its capacitor
	- Fan thermo-switch tripped	Allow the fan motor to cool to see if the fan comes back on; if the fan does not come back on, or it keeps tripping, replace the fan
	No voltage across terminals 8-9 of control board: - Faulty control board relay	Replace control board
All indicator lights off and ON/OFF switch will not operate	Check electrical supply	Plug unit into receptacle, or reset wall circuit breaker
	Fuse of control board blown	Change the fuse
	No voltage from the control board transformer	Change the control board
	Connector between the control board and display board not connected properly	Check the connection
	Bad wire in the connector between the control board and display board	Replace the connector

1-4. ALARM MESSAGES

In the event of a system failure, the digital display will show an alarm message. These messages are coded; “AL-1”, “AL-2”, “AL-3”, “AL-5”, and “AL-6.” When an alarm occurs, the red alarm LED will illuminate and a buzzer (optional) will sound. Press the ALARM button to stop the buzzer.

NOTICE

The unit can operate on auto back-up if an alarm sounds for a faulty probe. Must select the Timer Mode, and enter a time.

Display	Cause	Correction
“AL-1”	Faulty air temperature probe	Replace the probe; unit can operate on auto back-up until a new probe is installed
“AL-2”	Faulty evaporator probe	Replace the probe; the de-icing cycle can operate at 50% of the setting in step 7 of the Programming Section
“AL-3”	Faulty Frigiprobe	Replace the probe; the Frigiprobe Mode will not operate, but the unit will operate in the Timer Mode
“AL-5”	Temperature too low in the hold mode	Faulty control board - replace control board; faulty contactor - replace contactor
“AL-6”	Temperature too high in the hold mode	Faulty control board - replace control board; door opened too much - make sure door stays closed as much as possible

RESISTANCE-TEMPERATURE CONVERSION TABLE FOR PROBES

TEMP. °C	TEMP. °F	R KΩ
-40	-40	336.6
-39	-38,2	315.0
-38	-36,4	295.0
-37	-34,6	276.4
-36	-32,8	259.0
-35	-31	242.8
-34	-29,2	227.8
-33	-27,4	213.8
-32	-25,6	200.6
-31	-23,8	188.4
-30	-22	177.0
-29	-20,2	166.4
-28	-18,4	156.5
-27	-16,6	147.2
-26	-14,8	138.5
-25	-13	130.4
-24	-11,2	122.9
-23	-9,4	115.8
-22	-7,6	109.1
-21	-5,8	102.9
-20	-4	97.12
-19	-2,2	91.66
-18	-0,4	86.54
-17	1,4	81.72
-16	3,2	77.22
-15	5	72.98
-14	6,8	69.00
-13	8,6	65.26
-12	10,4	61.76
-11	12,2	58.46
-10	14	55.34
-9	15,8	52.42
-8	17,6	49.66
-7	19,4	47.08
-6	21,2	44.64
-5	23	42.34
-4	24,8	40.16
-3	26,6	38.12
-2	28,4	36.20
-1	30,2	34.38
0	32	32.66
1	33,8	31.04
2	35,6	29.50
3	37,4	28.06
4	39,2	26.68
5	41	25.40
6	42,8	24.18
7	44,6	23.02

TEMP. °C	TEMP. °F	R KΩ
8	46,4	21.92
9	48,2	20.88
10	50	19.90
11	51,8	18.97
12	53,6	18.09
13	55,4	17.26
14	57,2	16.46
15	59	15.71
16	60,8	15.00
17	62,6	14.32
18	64,4	13.68
19	66,2	13.07
20	68	12.49
21	69,8	11.94
22	71,6	11.42
23	73,4	10.92
24	75,2	10.45
25	77	10.00
26	78,8	9.574
27	80,6	9.166
28	82,4	8.778
29	84,2	8.408
30	86	8.058
31	87,8	7.722
32	89,6	7.404
33	91,4	7.098
34	93,2	6.808
35	95	6.532
36	96,8	6.268
37	98,6	6.016
38	100,4	5.776
39	102,2	5.546
40	104	5.326
41	105,8	5.118
42	107,6	4.918
43	109,4	4.726
44	111,2	4.544
45	113	4.368
46	114,8	4.202
47	116,6	4.042
48	118,4	3.888
49	120,2	3.742
50	122	3.602
51	123,8	3.468
52	125,6	3.340
53	127,4	3.216
54	129,2	3.098
55	131	2.986

TEMP °C	TEMP. °F	R KΩ
56	132,8	2.878
57	134,6	2.774
58	136,4	2.674
59	138,2	2.580
60	140	2.488
61	141,8	2.400
62	143,6	2.316
63	145,4	2.234
64	147,2	2.158
65	149	2.082
66	150,8	2.012
67	152,6	1.942
68	154,4	1.876
69	156,2	1.813
70	158	1.751
71	159,8	1.693
72	161,6	1.637
73	163,4	1.582
74	165,2	1.530
75	167	1.480
76	168,8	1.432
77	170,6	1.385
78	172,4	1.341
79	174,2	1.298
80	176	1.256
81	177,8	1.216
82	179,6	1.178
83	181,4	1.141
84	183,2	1.105
85	185	1.071
86	186,8	1.038
87	188,6	1.006
88	190,4	0.975
89	192,2	0.9452
90	194	0.9164
91	195,8	0.8888
92	197,6	0.8620
93	199,4	0.8364
94	201,2	0.8114
95	203	0.7874
96	204,8	0.7642
97	206,6	0.7418
98	208,4	0.7202
99	210,2	0.6994
100	212	0.6792
101	213,8	0.6596
102	215,6	0.6408
103	217,4	0.6226

TEMP. °C	TEMP. °F	R KΩ
104	219,2	0.6050
105	221	0.5880
106	222,8	0.5714
107	224,6	0.555
108	226,4	0.5402
109	228,2	0.5252
110	230	0.5108
111	231,8	0.4968
112	233,6	0.4832
113	235,4	0.4702
114	237,2	0.4574
115	239	0.4452
116	240,8	0.4334
117	242,6	0.42.18
118	244,4	0.4106
119	246,2	0.3998
120	248	0.3894
121	249,8	0.3792
122	251,6	0.3694
123	253,4	0.3598
124	255,2	0.3506
125	257	0.3416
126	258,8	0.3328
127	260,6	0.3244
128	262,4	0.3162
129	264,2	0.3082
130	266	0.3006
131	267,8	0.2930
132	269,6	0.2858
133	271,4	0.2788
134	273,2	0.2720
135	275	0.2652
136	276,8	0.2588
137	278,6	0.2526
138	280,4	0.2464
139	282,2	0.2406
140	284	0.2348
141	285,8	0.2292
142	287,6	0.2238
143	289,4	0.2184
144	291,2	0.2134
145	293	0.2084
146	294,8	0.2036
147	296,6	0.1988
148	298,4	0.1942
149	300,2	0.1897
150	302	0.1854

SECTION 2. MAINTENANCE

2-1. INTRODUCTION

This section provides procedures for the checkout and replacement of the various parts used within the blast chiller/freezer. Before replacing any parts, refer to the Troubleshooting Section. It will aid you in determining the cause of the malfunction.

2-2. MAINTENANCE HINTS

1. You may want to use a multimeter to check the electric components.

2. When the manual refers to the circuit being closed, the multimeter should read zero unless otherwise noted.

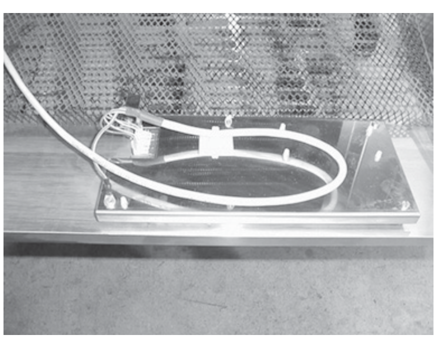
3. When the manual refers to the circuit being open, the multimeter reads infinity.

2-3. COMPRESSOR, DRIER, EXPANSION VALVE, SIGHT GLASS, AND CONDENSER FAN

These parts involve manipulating the refrigerant in the system. Any removal or adjustments to these parts must be handled by a certified refrigeration expert.

2-4. DISPLAY BOARD AND AUXILIARY DISPLAY BOARD





1. Remove the electrical power to the unit.



To avoid electrical shock or property damage, move the power switch to OFF and disconnect main circuit breaker, or unplug cord at wall receptacle.

2. Using a Phillips head screwdriver, remove the two screws securing the front panel, and lower the panel.

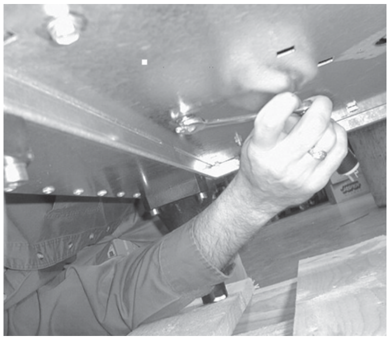
3. Pull the connector from the corner of the display board.

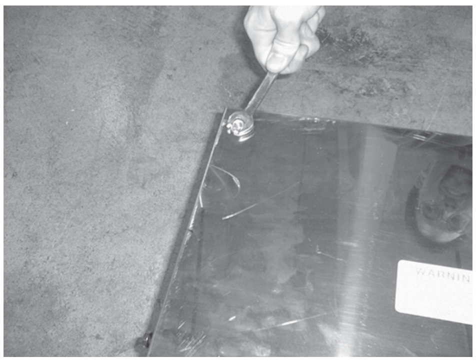
4. Using a flathead screwdriver, remove the screws securing the bracket to the panel, and pull the bracket from the panel.

5. Using a flathead screwdriver, push in on the clips on the plastic studs and pull the studs through the bracket. Remove the display board from the bracket.

6. Install the new board in reverse order.

2-5. CONTROL BOARD





1. Remove the electrical power to the unit.



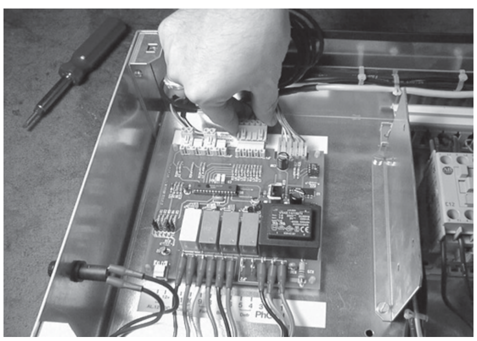
To avoid electrical shock or property damage, move the power switch to OFF and disconnect main circuit breaker, or unplug cord at wall receptacle.

2. Using a Phillips head screwdriver, remove the two screws securing the front panel, and lower the panel.

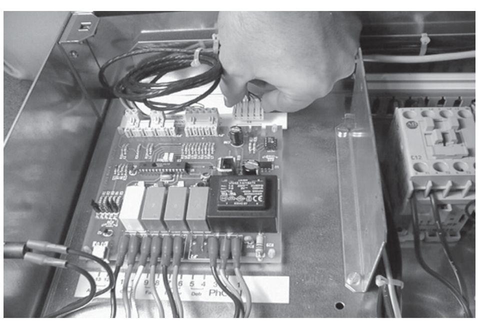
3. Remove the two bolts (under unit) securing the control box.

4. Pull the box from the front of the unit.

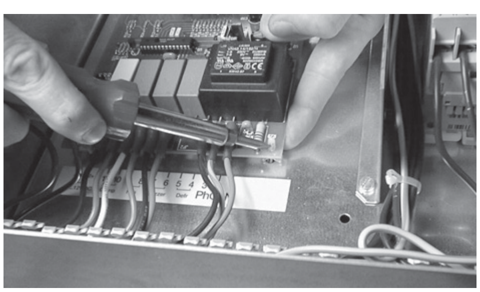
5. Remove the four screws securing the control box top and pull the top from the box.



6. Pull the connectors from the control board.



7. Label and pull the wires from the control board.



8. Using a flathead screwdriver, push in on the clips on the plastic studs and pull the studs through the bracket. Remove the control board from the box.

9. Install the new board in reverse order.

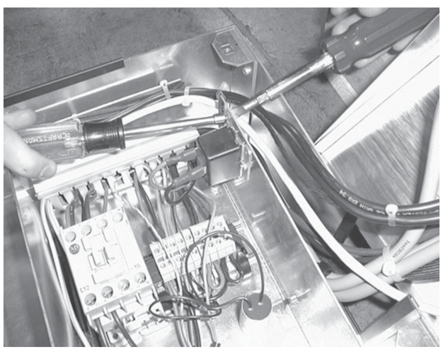
2-6. BUZZER

1. Remove the electrical power to the unit.



To avoid electrical shock or property damage, move the power switch to OFF and disconnect main circuit breaker, or unplug cord at wall receptacle.

2. Using a Phillips head screwdriver, remove the two screws securing the front panel, and lower the panel.
3. Remove the two bolts (under unit) securing the control box.
4. Pull the box from the front of the unit.



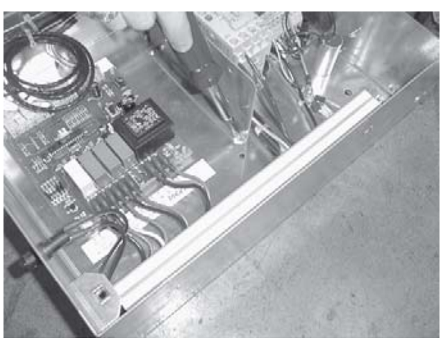
5. Remove the four screws securing the control box top and pull the top from the box.
6. Label and remove the wires to the buzzer.
7. Remove the two screws securing the buzzer to the bracket and remove the buzzer from the bracket.
8. Install new buzzer in reverse order.

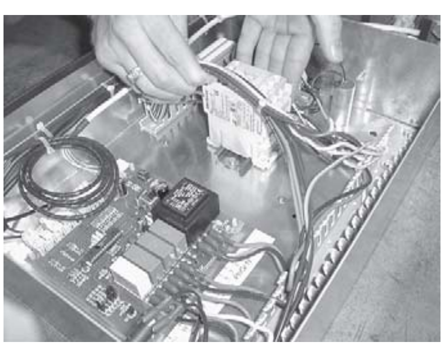
2-7. CONTACTOR

1. Remove the electrical power to the unit.



To avoid electrical shock or property damage, move the power switch to OFF and disconnect main circuit breaker, or unplug cord at wall receptacle.





2. Follow steps 2 through 5 in the Control Board Section.
3. Using a flathead screwdriver, remove the two screws securing the bracket to the box, and remove the bracket.
4. Label and remove the wires from the contactor.
5. Slide the contactor off the retainer.
6. Install new contactor in reverse order.

2-8. DOOR FRAME HEATER



1. Remove the electrical power to the unit.



To avoid electrical shock or property damage, move the power switch to OFF and disconnect main circuit breaker, or unplug cord at wall receptacle.

2. Remove the door to the unit by removing the screws in the lower hinge of the door.

3. Remove the control box from the unit, following steps 2 through 5 in the Control Board Section.

3. Remove the plastic tabs that secures the decorator covers around the door opening, and remove the covers.

4. Peel the heater out of the groove and disconnect the wires (inside control box) to the element, and remove the element from the unit.

5. Install new heater in reverse order and press the plastic tabs in place to secure the decorator covers (tabs included with new heater).

2-9. EVAPORATOR FAN



1. Remove the electrical power to the unit.



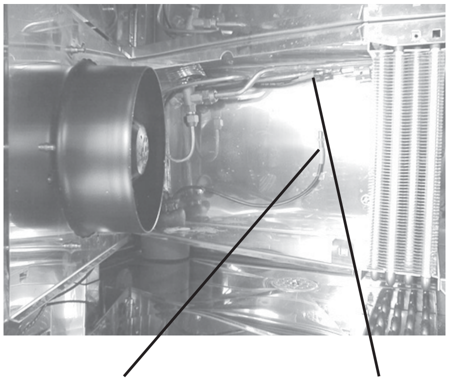
To avoid electrical shock or property damage, move the power switch to OFF and disconnect main circuit breaker, or unplug cord at wall receptacle.

2. Using a Phillips head screwdriver, remove the two screws securing the fan shroud, and pull out on the shroud.




3. Using a Phillips head screwdriver, remove the three screws securing the fan guard, and remove the guard.
4. Remove the control box from the unit, following steps 2 through 5 in the Control Board Section.
5. Disconnect the wires (inside control box) to the fan.
6. Remove the three screws securing the fan to the evaporator door, and pull the fan from the unit.
7. Install new fan in reverse order.

2-10. AIR PROBE AND EVAPORATOR PROBE



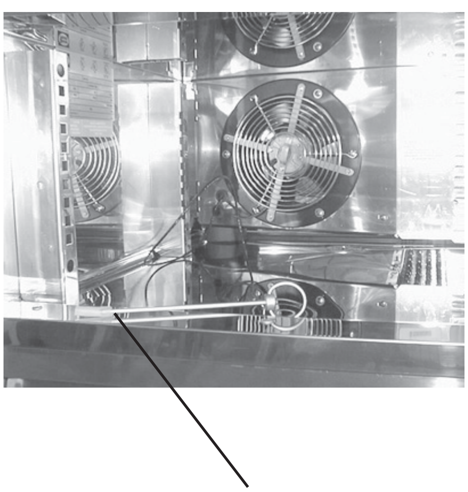
1. Remove the electrical power to the unit.



To avoid electrical shock or property damage, move the power switch to OFF and disconnect main circuit breaker, or unplug cord at wall receptacle.

2. Using a Phillips head screwdriver, remove the two screws securing the evaporator door, and pull out on the door.
3. Remove the appropriate probe from the bracket. (See photo at left).
4. Remove the control box from the unit, following steps 2 through 5 in the Control Board Section.
5. Find the appropriate wires to the PC board and remove the wires from the board.
6. Pull the probe wire through the wiring harness.
7. Install new probe in reverse order.

2-11. FRIGIPROBE



1. Remove the electrical power to the unit.



To avoid electrical shock or property damage, move the power switch to OFF and disconnect main circuit breaker, or unplug cord at wall receptacle.

2. Using a Phillips head screwdriver, remove the two screws securing the evaporator door, and pull out on the door.
3. Remove the control box from the unit, following steps 2 through 5 in the Control Board Section.
4. Find the appropriate wires to the PC board and remove the wires from the board.
5. Pull the probe wire through the wiring harness.
6. Install new probe in reverse order.

2-12. FUSE AND FUSE HOLDER

If the unit has no power, the fuse may be blown. To access the fuse:

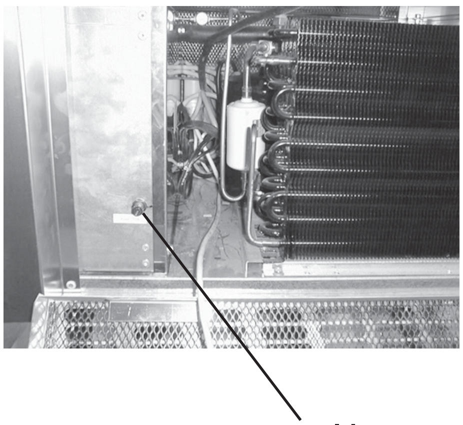
1. Remove the electrical power to the unit.



To avoid electrical shock or property damage, move the power switch to OFF and disconnect main circuit breaker, or unplug cord at wall receptacle.

2. Remove the two screws securing the front panel and pull down the panel.

3. Unscrew the fuse cap and pull the 10 amp fuse from the holder.



Fuse Holder

To check and replace the fuse holder:

1. Remove the two screws securing the front panel and pull down the panel.

2. Remove the two bolts securing the control box and pull the control box from the unit. (See Control Board Section.)

3. Remove the four screws securing box top and remove the top.

4. Remove the wires from the fuse holder and check for continuity across the terminals. The circuit should show closed.

If open, replace fuse holder.

5. Reinstall the control box and front panel, and unit is now ready for use.

2-13. CONDENSATION EVAPORATOR

1. Remove electrical power to unit and allow evaporator to cool.



To avoid electrical shock or property damage, move the power switch to OFF and disconnect main circuit breaker, or unplug cord at wall receptacle.

Also, if evaporator is functional, it will be very hot! Allow evaporator to cool before removing, or burns could result.

2-13. CONDENSATION EVAPORATOR (Continued)

2. Bend out the clips securing the rodent cover on the back of the unit, and pull the cover down.



3. Disconnect the wires to the evaporator.

4. Pull up on the bottom of the evaporator to disengage the evaporator from the bracket. The evaporator is snapped into place. No hardware is securing it.

5. Replace evaporator in reverse order.

2-14. DOOR SEAL

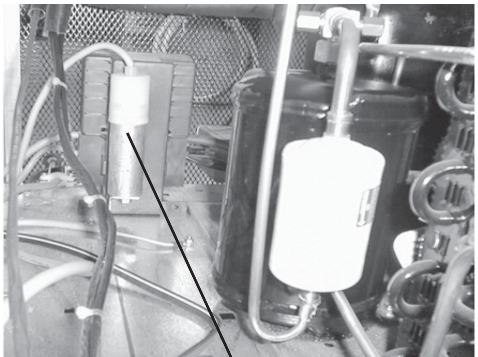
1. Open door and pull out on a corner of the seal until seal clears the retainer.



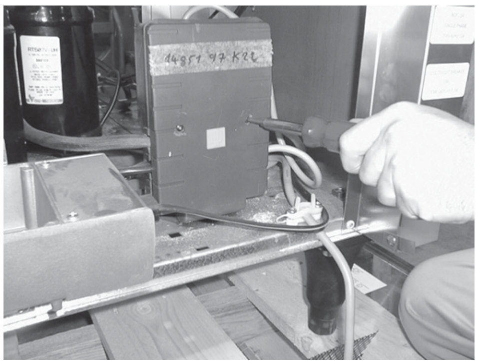
2. Continue around the door, pulling the seal from the door.

3. Install new seal, starting with the four corners first.

2-15. RUN CAPACITOR



Run Capacitor



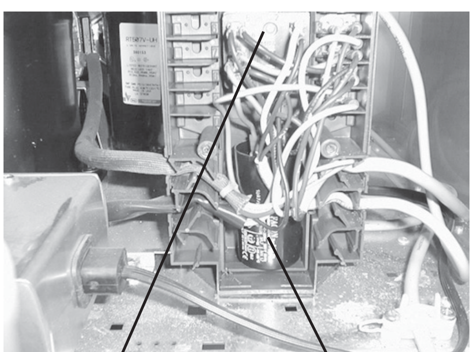
1. Remove the electrical power to the unit.



To avoid electrical shock or property damage, move the power switch to OFF and disconnect main circuit breaker, or unplug cord at wall receptacle.

2. Remove the two screws securing the front panel and pull down the panel.
3. Bend out the clips securing the rodent cover on the back of the unit, and pull the cover down.
4. Using a Phillips head screwdriver, remove the two screws securing the cover of the junction box, and remove the cover.
5. Disconnect the wires from the relay to the capacitor.
6. Remove the capacitor from the unit, from the front.
7. Install new capacitor in reverse order.

2-16. START CAPACITOR AND START RELAY



Start Relay Start Capacitor

1. Remove the electrical power to the unit.



To avoid electrical shock or property damage, move the power switch to OFF and disconnect main circuit breaker, or unplug cord at wall receptacle.

2. Bend out the clips securing the rodent cover on the back of the unit, and pull the cover down.
3. Using a Phillips head screwdriver, remove the two screws securing the cover of the junction box, and remove the cover. (See section 2-12 above).
4. Disconnect the wires to either the relay or the capacitor, and remove component from the unit.
5. Install new component in reverse order.

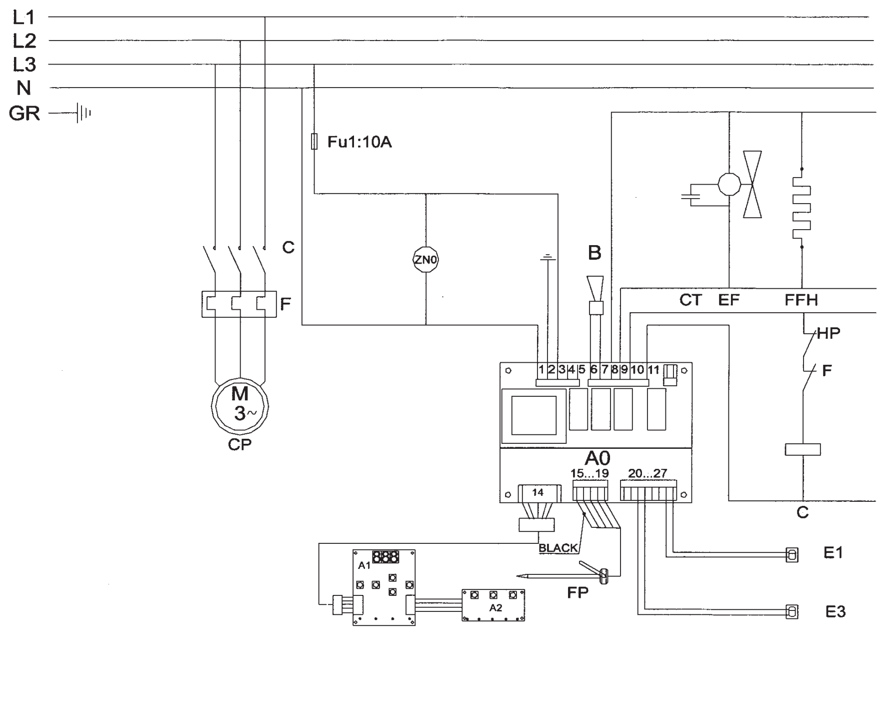
2-17. PREVENTIVE MAINTENANCE

As in all food equipment, the Henny Penny Blast Chiller/Freezer does require care and proper maintenance. The table below provides a summary of scheduled maintenance.

Procedure	**Frequency**
Clean all surfaces with a soft cloth, soap and water; do not use abrasives	Daily
De-ice the evaporator	Daily
Clean the condenser of dust and obstructions	Monthly

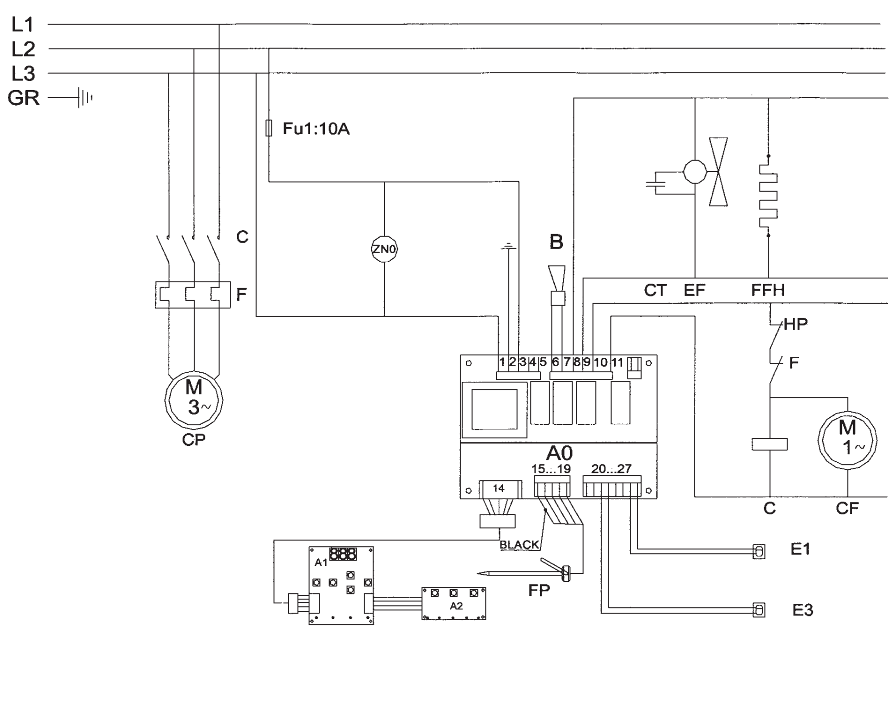
Wiring Diagrams BCF/BCM-110

Mark	Designation
Fu1	Fuse
ZNO	Varisator
A0	Control board
A1	Display board
A2	Auxilliary display board
B	Buzzer
C	Contactor
CP	Compressor
CT	Capacitor
E1	Air probe
E3	Evaporator probe
EF	Evaporator fan
F	Thermal overload relay
FFH	Front frame heater
FP	Frigiprobe
HP	High pressure controller
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400V /50Hz/3+N+GR

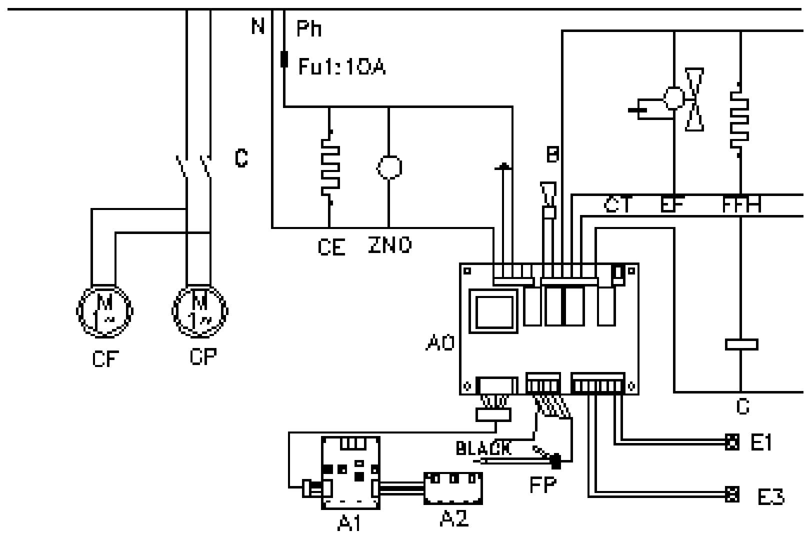
Mark	Designation
Fu1	Fuse
ZNO	Varisator
A0	Control board
A1	Display board
A2	Auxilliary display board
B	Buzzer
C	Contactor
CF	Compressor fan
CP	Compressor
CT	Capacitor
E1	Air probe
E3	Evaporator probe
EF	Evaporator fan
F	Thermal overload relay
FFH	Front frame heater
FP	Frigiprobe
HP	High pressure controller



208-240V/60Hz/3+GR

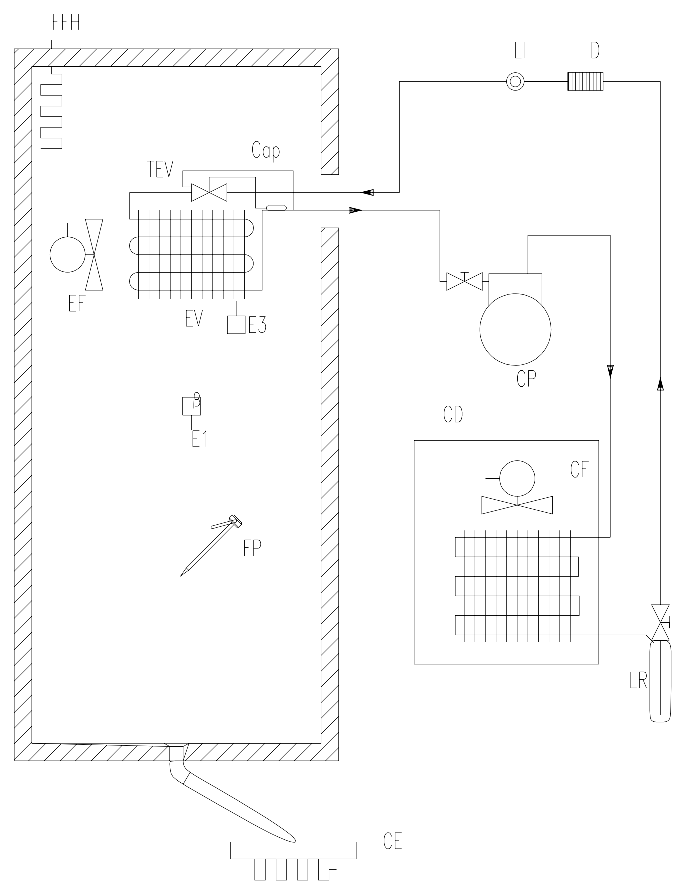
Wiring Diagram BCF-24/65

Mark	Designation
Fu1	Fuse
ZNO	Varistor
A0	Control board
A1	Display board
A2	Auxiliary display board
B	Buzzer
C	Contactor
CE	Condensate evaporator
CF	Condenser fan
CP	Compressor
CT	Capacitor
E1	Air probe
E3	Evaporator probe
EF	Evaporator fan
FFH	Front frame heater
FP	Frigiprobe

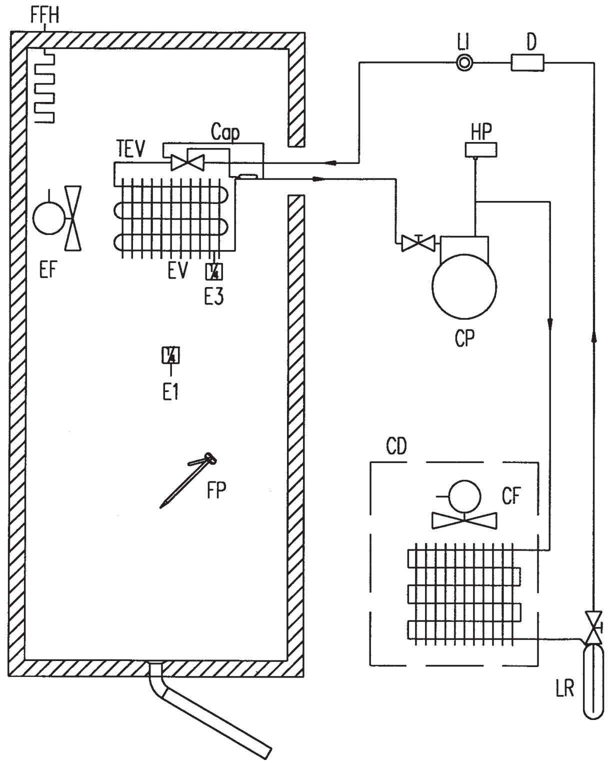


Refrigeration Diagram BCF-24/65

Mark	Designation
Cap	Capillary (not in BCF-24)
CD	Condenser without motor
CE	Condensate evaporator
CF	Condenser fan
CP	Compressor
D	Drier
EF	Evaporator fan
E1	Air probe
E3	Evaporator probe
EV	Evaporator
FFH	Front frame heater
FP	Frigiprobe
LI	Liquide indicator
LR	Liquide receiver
TEV	Thermostatique expansion valve

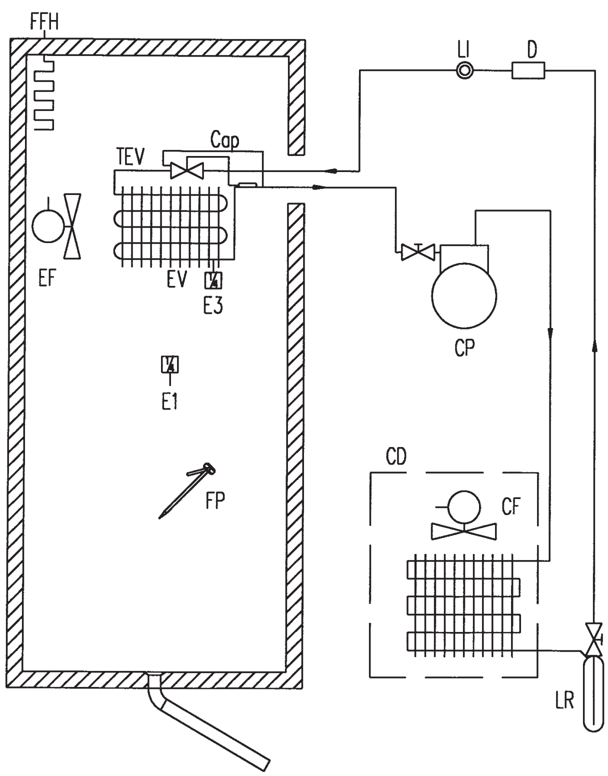


Refrigeration Diagram BCF/BCM-110-UL



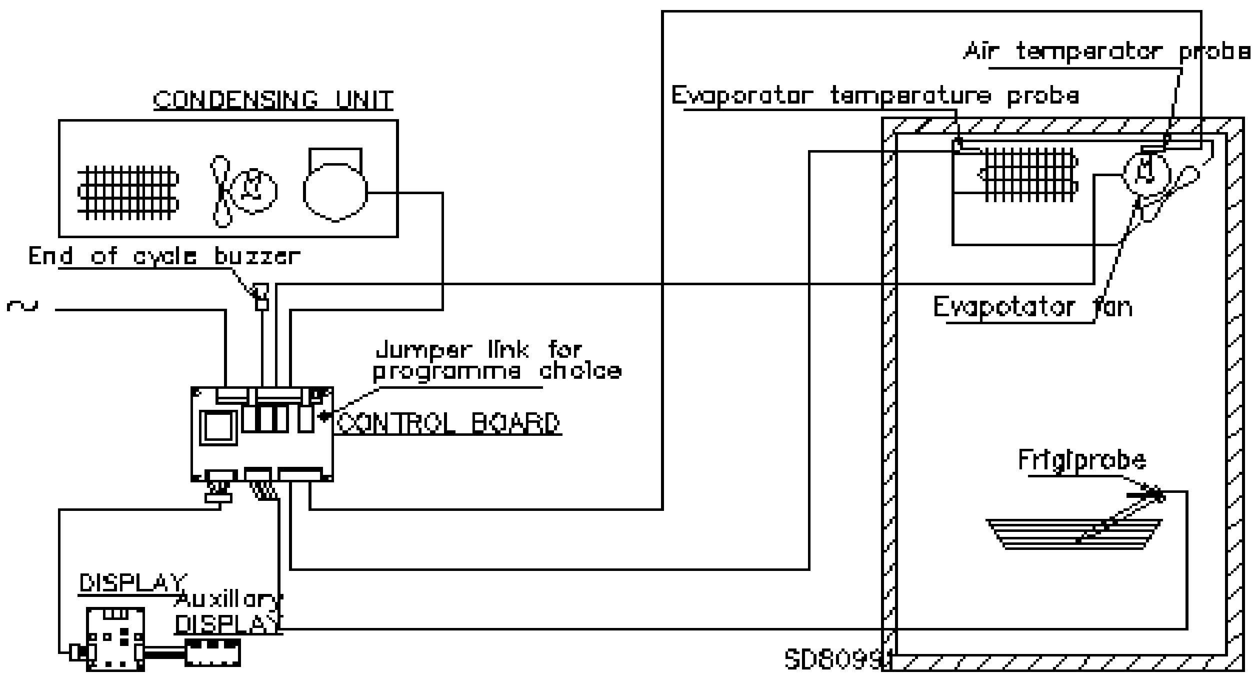
Mark	Designation
Cap	Capillary
CD	Condenser
CP	Compressor
D	Drier
EF	Evaporator fan
E1	Air probe
E3	Evaporator probe
EV	Evaporator
FFH	Front frame heater
FP	Frigiprobe
LI	Liquide indicator
LR	Liquide receiver
TEV	Thermostatique expansion valve
HP	High pressure switch
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Refrigeration Diagram BCF/BCM-110-Int'l.

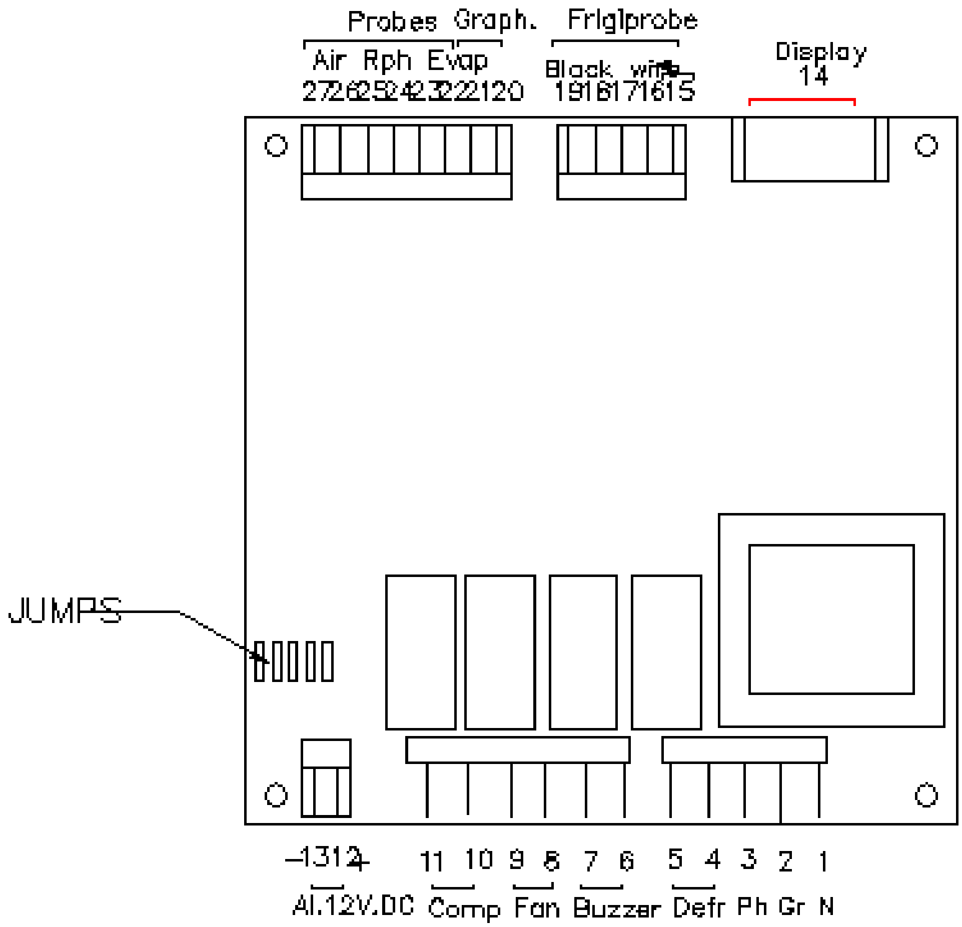


Mark	Designation
Cap	Capillary
CD	Condenser
CP	Compressor
D	Drier
EF	Evaporator fan
E1	Air probe
E3	Evaporator probe
EV	Evaporator
FFH	Front frame heater
FP	Frigiprobe
LI	Liquide indicator
LR	Liquide receiver
TEV	Thermostatique expansion valve
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.	.
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Electrical/Refrigeration Diagram



Wiring Information of PC Board



1-3 POWER SUPPLY
2 COMPULSORY EARTHING CONNECTION
4-5 POWER SUPPLY OUTPUT FOR ELECTRIC HEATING ELEMENT FOR DE-ICING OF THE EVAPORATOR (NOT USED)
6-7 POWER SUPPLY OUTPUT FOR BUZZER SIGNAL
8-9 POWER SUPPLY OUTPUT TO FAN(S) AND FRONT FRAME HEATER (ANTI-FOGGING)
10-11 POWER SUPPLY OUTPUT TO COMPRESSOR UNIT
12-13 12VDC OUTPUT TO ALARM BUZZER (NOT USED)
14 DISPLAY INPUTS
15-19 FRIGIPROBE INPUTS (BLACK WIRE TO 15, WIRING UNIMPORTANT FOR OTHER COLORS)
20-21 0 TO 1 VOLT OUTPUT TO GRAPHIC RECORDER : (HOTTEST FRIGIPROBE TEMPERATURE, NOT USED)
22-23 EVAPORATOR TEMPERATURE PROBE INPUTS
24-25 PHOTO-ELECTRIC RESISTOR INPUTS (NOT USED)
26-27 AIR TEMPERATURE PROBE INPUTS

LIMITED WARRANTY FOR HENNY PENNY EQUIPMENT

Subject to the following conditions, Henny Penny Corporation makes the following limited warranties to the original purchaser only for Henny Penny appliances and replacement parts:

NEW EQUIPMENT: Any part of a new appliance, except baskets, lamps, and fuses, which proves to be defective in material or workmanship within two (2) years from date of original installation, will be repaired or replaced without charge F.O.B. factory, Eaton, Ohio, or F.O.B. authorized distributor. Baskets will be repaired or replaced for ninety (90) days from date of original installation. Lamps and fuses are not covered under this Limited Warranty. To validate this warranty, the registration card for the appliance must be mailed to Henny Penny within ten (10) days after installation.

FILTER SYSTEM: Failure of any parts within a fryer filter system caused by the use of the non-OEM filters or other unapproved filters is not covered under this Limited Warranty.

REPLACEMENT PARTS: Any appliance replacement part, except lamps and fuses, which proves to be defective in material or workmanship within ninety (90) days from date of original installation will be repaired or replaced without charge F.O.B. factory, Eaton, Ohio, or F.O.B. authorized distributor.

The warranty for new equipment covers the repair or replacement of the defective part and includes labor charges and maximum mileage charges of 200 miles round trip for a period of one (1) year from the date of original installation.

The warranty for replacement parts covers only the repair or replacement of the defective part and does not include any labor charges for the removal and installation of any parts, travel, or other expenses incidental to the repair or replacement of a part.

EXTENDED FRYPOT WARRANTY: Henny Penny will replace any frypot that fails due to manufacturing or workmanship issues for a period of up to seven (7) years from date of manufacture. This warranty shall not cover any frypot that fails due to any misuse or abuse, such as heating of the frypot without shortening.

0 TO 3 YEARS: During this time, any frypot that fails due to manufacturing or workmanship issues will be replaced at no charge for parts, labor, or freight. Henny Penny will either install a new frypot at no cost or provide a new or reconditioned replacement fryer at no cost.

3 TO 7 YEARS: During this time, any frypot that fails due to manufacturing or workmanship issues will be replaced at no charge for the frypot only. Any freight charges and labor costs to install the new frypot as well as the cost of any other parts replaced, such as insulation, thermal sensors, high limits, fittings, and hardware, will be the responsibility of the owner.

Any claim must be presented to either Henny Penny or the distributor from whom the appliance was purchased. No allowance will be granted for repairs made by anyone else without Henny Penny's written consent. If damage occurs during shipping, notify the sender at once so that a claim may be filed.

THE ABOVE LIMITED WARRANTY SETS FORTH THE SOLE REMEDY AGAINST HENNY PENNY FOR ANY BREACH OF WARRANTY OR OTHER TERM. BUYER AGREES THAT NO OTHER REMEDY (INCLUDING CLAIMS FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES) SHALL BE AVAILABLE.

The above limited warranty does not apply (a) to damage resulting from accident, alteration, misuse, or abuse; (b) if the equipment's serial number is removed or defaced; or (c) for lamps and fuses. THE ABOVE LIMITED WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS, AND ALL OTHER WARRANTIES ARE EXCLUDED. HENNY PENNY NEITHER ASSUMES NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT ANY OTHER OBLIGATION OR LIABILITY.

Revised 01/01/07

SECTION 3. PARTS INFORMATION

3-1. INTRODUCTION

This section identifies and lists the replaceable parts of the Henny Penny blast chiller/freezer.

3-2. GENUINE PARTS

Use only genuine Henny Penny parts in your cabinet. Using a part of lesser quality or substitute design may result in cabinet damage or personal injury.

3-3. HOW TO ORDER PARTS

Once the part you want to order has been found in the Parts List, write down the following information:

1. From the Parts List
(Sample)
    Item Number 13
    Part Number 9501.6267
    Description Condenser

2. From the data plate
(Sample)
    Product Number BCF.100
    Serial Number 0001
    Voltage 208V

3-4. PRICES

Your distributor has a price parts list and will be glad to inform you of the cost of your parts order.

3-5. DELIVERY

Commonly replaced items are stocked by your distributor and will be sent out when your order is received. Other parts will be ordered by your distributor from Henny Penny Corporation. Normally, these will be sent to your distributor within three working days.

3-6. WARRANTY

All replacement parts (except lamps and fuses) are covered under warranty for 90 days against manufacturing defects and workmanship. If damage occurs during shipping, notify the carrier at once so that a claim may be properly filed. Refer to warranty on the front of this section for other rights and limitations.

3-7. RECOMMENDED SPARE PARTS FOR DISTRIBUTORS

Recommended replacement parts, stocked by your distributor, are indicated with √ in the parts lists. Please use care when ordering recommended parts, because all voltages and variations are marked. Distributors should order parts based upon common voltages and equipment sold in their territory.

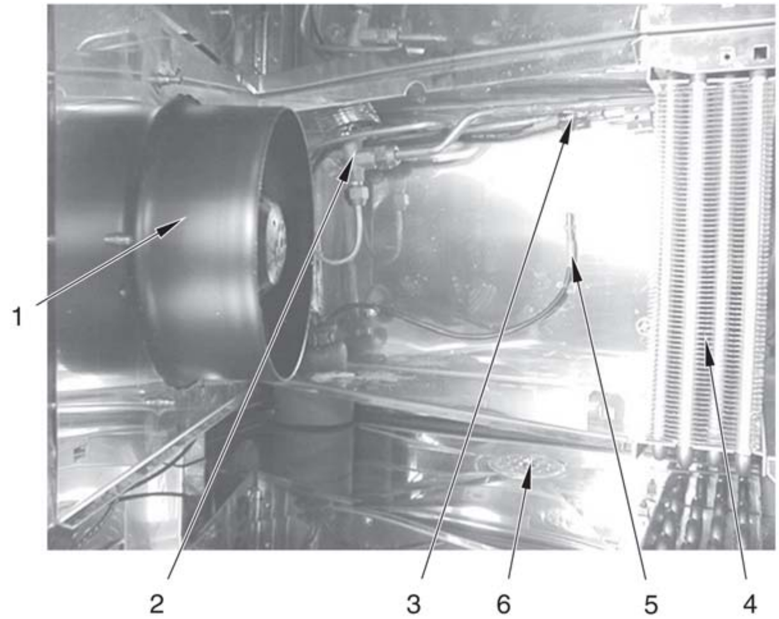


Figure 1. Evaporator, Fan, & Expansion Valve

Item No.	Part No.	Description	BCF-24	BCF-65	BCM-110 BCF-110
√ 1	9560.0326	Evaporator Fan - BCF-24	1	-	-
√ 1	9560.0334	Evaporator Fan - BCF-65; BCF/BCM-110	-	1	2
√ 1	9501.5939	Evaporator Fan - BCF-24 - Int'l. - 50 Hz.	1	-	-
√ 1	9501.5947	Evaporator Fan - BCF-65/110 - Int'l. - 50 Hz.	-	1	2
√ 2	9502.5375	Thermostatic Expansion Valve-BCF-24 (before 7/99)	1	-	-
√ 2	9502.5383	Thermostatic Expansion Valve-BCF-65 (before 10/99)	-	1	-
√ 2	9503.4377	Thermostatic Expansion Valve-BCF-24 (7/99 & after)	1	-	-
√ 2	9503.4062	Thermo. Expan.Valve-BCF-65 (10/99 & after); BCF/M-110	-	1	1
√ 3	9500.7209	Evaporator Probe	1	1	1
4	9501.6291	Evaporator - BCF-24	1	-	-
4	9500.6953	Evaporator - BCF-65	-	1	-
4	9501.6275	Evaporator - BCF/BCM-110	-	-	1
√ 5	9500.7209	Air Probe	1	1	1
6	9500.2036	Drain Cover	1	1	1
7*	9500.8819	Nozzle-Expansion Valve-BCF-24 (before 7/99)	1	-	-
7*	9503.4070	Nozzle-Expansion Valve-BCF-24 (7/99 & after)	1	-	-
7*	9500.8835	Nozzle-Expansion Valve-BCF-65 (before 10/99)	-	1	-
7*	9503.4393	Nozzle-Expansion Valve-BCF-65 (10/99 & after)	-	1	-
7*	9503.4401	Nozzle-Expansion Valve-BCF/BCM-110	-	-	1

√ recommended parts
*not shown

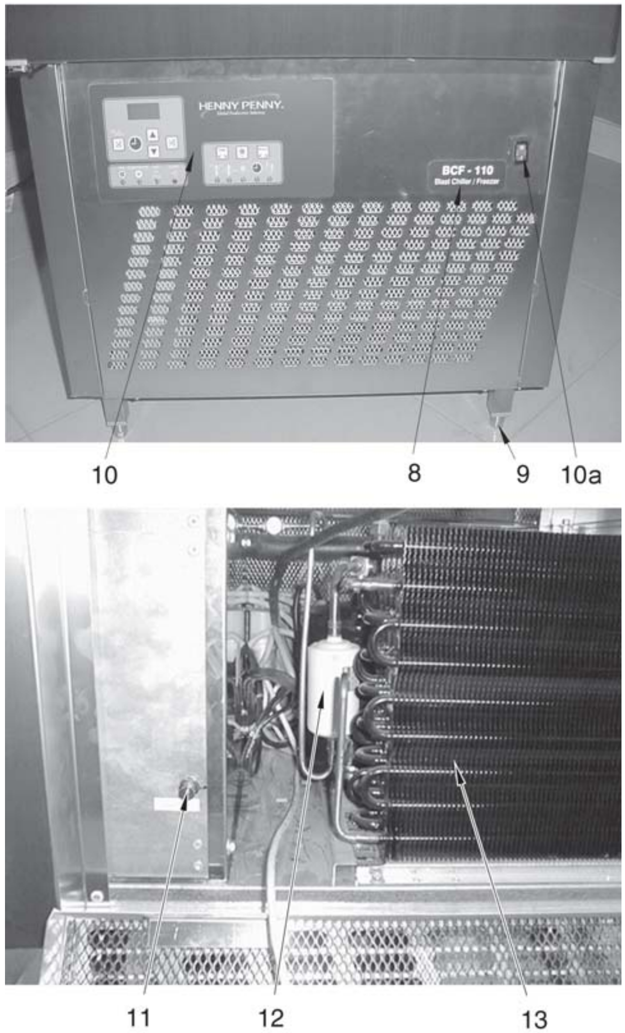


Figure 2. Drier & Condenser

Item No.	Part No.	Description	BCF-24	BCF-65	BCM-110 BCF-110
8	9503.3593	Decal - BCF-24	1	-	-
8	9503.3619	Decal - BCF-65	-	1	-
8	9503.7859	Decal - BCF/BCM-110	-	-	1
9	9505.0530	Foot - BCF-24/65 (before 7/99); BCF-65 (before 10/99)	4	4	-
*	9500.4016	Cage Nut (used w/9505.0530)	4	4	-
9	9503.6562	Foot - BCF-24 (7/99 & after); BCF-65 (10/99 & after)	4	4	4
10	9503.3601	Decal - Control	1	1	1
√ 10a	9504.0128	Power Switch	1	1	1
√ 11	9503.3650	Fuse 10 Amp	1	1	1
12	9500.7936	Drier - BCF-24 (before 7/99); BCF-65 (before 10/99)	1	1	-
12	9503.7800	Drier - BCF-24 (7/99 & after); BCF-65 (10/99 & after)	1	1	1
13	9501.6267	Condenser-BCF-24-208 volt-60 Hz. units	1	-	-
13	9503.3749	Condenser-BCF-65-208 volt-60 Hz. units	-	1	-
13	9503.7784	Condenser-BCF/BCM-110 - 208-240 volt-60 Hz units and 400 volt-50 Hz units	-	-	1
13	9502.7595	Condenser-BCF-24-Int’l.-50 Hz. units	1	-	-
13	9503.4120	Condenser-BCF-65-Int’l.-50 Hz. units	-	1	-

√ recommended parts/*not shown

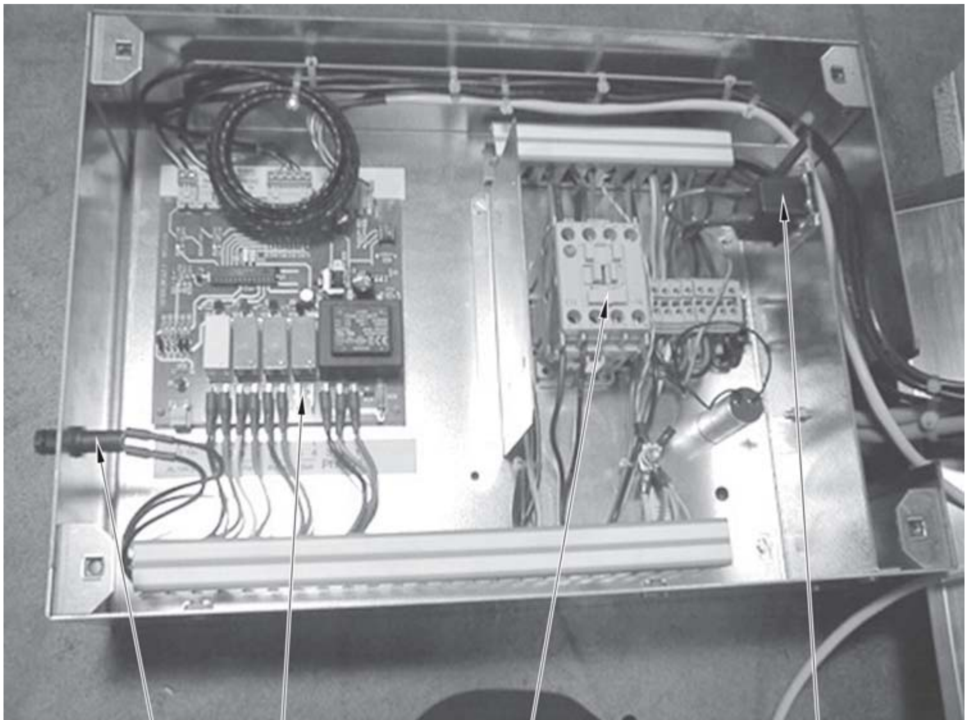


Figure 3. Electrical Parts

Item No.	Part No.	Description	BCF-24	BCF-65	BCM-110 BCF-110
√ 14	9503.3643	Fuse Holder	1	1	1
√ 15	9504.0205	Control Board	1	1	1
√ 16	9503.0912	Contactor - 208 Volt - UL	1	1	1
√ 16	9501.5160	Contactor - 240 Volt - 50 Hz.	1	1	1
√ 17*	9503.0185	Varistor - V320LA20A	1	1	1
√ 18	9503.3726	Buzzer - 240 Volt - UL	1	1	1
√ 18	9501.8701	Buzzer - 230 Volt - 50 Hz.	1	1	1
√ 19*	9503.7719	Communication Board	1	1	1

√ recommended parts
*not shown

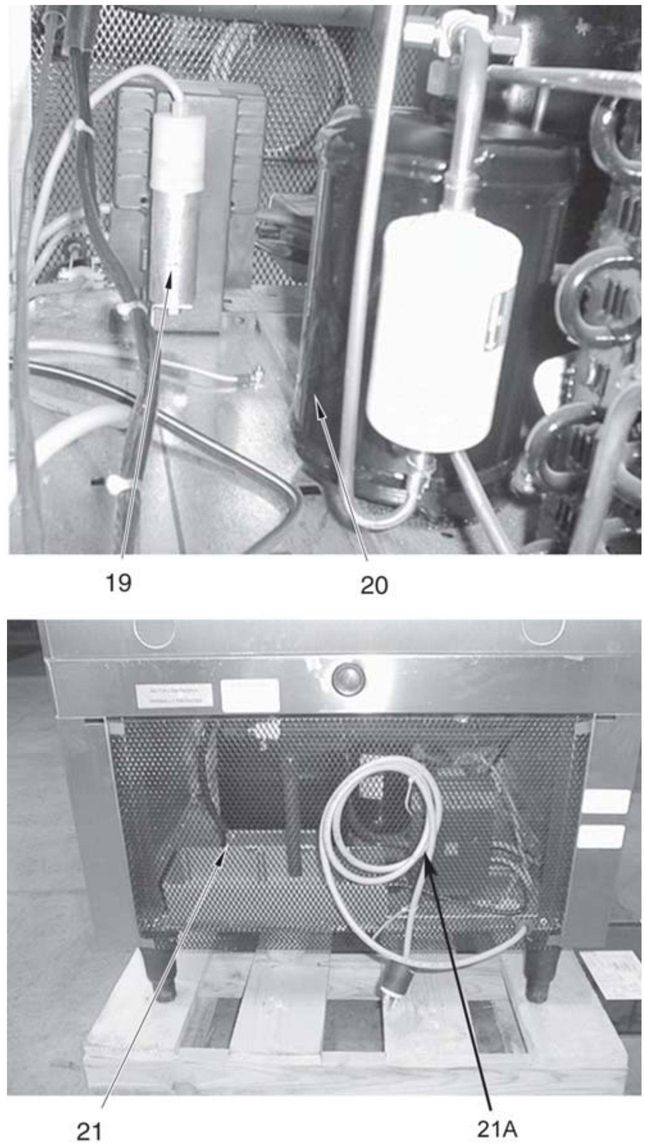


Figure 4. Capacitor, Receiver, & Rear Cover

Item No.	Part No.	Description	BCF-24	BCF-65	BCM-110 BCF-110
√ 19	9502.5649	Run Capacitor 1.5 mF - BCF-24*	1	-	-
√ 19	9502.6563	Run Capacitor 4 mF -BCF-65*; BCF/BCM-110	-	1	2
√ 19	9502.5243	Run Capacitor 2 mF-50 Hz.-Int'l.-BCF-24*	1	-	-
√ 19	9502.5235	Run Capacitor 6 mF-50 Hz.-Int'l.-BCF-65*; BCF/BCM-110	-	1	2
20	9503.2041	Liquid Receiver - BCF-24/65	1	1	-
20	9502.5045	Liquid Receiver - BCF/BCM-110	-	-	1
20	9500.5989	Liquid Receiver - BCF-24 - Int'l.	1	-	-
20	9503.4096	Liquid Receiver - BCF-65; BCF/BCM-110 - Int'l.	-	1	1
21	9542.3588	Rear Rodent Cover - BCF-24 (before 7/99)	1	-	-
21	9542.3596	Rear Rodent Cover - BCF-65 (before 10/99)	-	1	-
21	9542.6193	Rear Rodent Cover - BCF-24 (7/99 & after)	1	-	-
21	9542.6227	Rear Rodent Cover - BCF/BCM-110/65 UL (10/99 & after)	-	1	1
21	9542.9049	Rear Rodent Cover - BCF/BCM-110 - Int'l	-	-	1
21A	9503.3411	Cord and Plug Assembly	1	1	-

√ recommended parts * Included in the electrical component set for the compressor

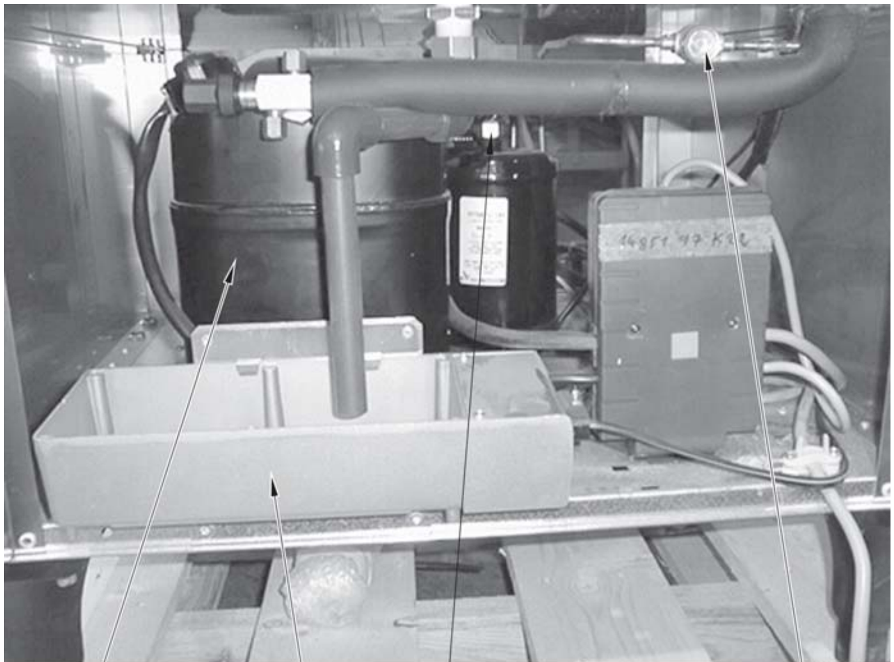


Figure 5. Compressor & Sight Glass

Item No.		Part No.	Description	BCF-24	BCF-65	BCM-110 BCF-110
	22	9503.0771	Compressor - UL - BCF-24	1	-	-
√		9526.0683	Elec. Component Set-Compressor-BCF-24	1	-	-
	22	9503.3049	Compressor - UL - BCF-65	-	1	-
√		9526.0691	Elec. Component Set-Compressor-BCF-65	-	1	-
	22	9502.5417	Compressor - Int'l.-BCF-24-230 Volt-50 Hz.	1	-	-
√		9526.0832	Elec. Comp. Set-Compressor-230 V.-50 Hz.	1	-	-
	22	9502.5425	Compressor - Int'l.-BCF-65-230 Volt-50 Hz.	-	1	-
√		9526.0840	Elec. Comp. Set-Compressor-230 V.-50 Hz.	-	1	-
	22	9503.3577	Compressor - Int'l.-BCF-24-200 Volt-50 Hz.	1	-	-
√		9526.0816	Elec. Comp. Set-Compressor-208 V.-50 Hz.	1	-	-
	22	9503.4104	Compressor - Int'l.-BCF-65-200 Volt-50 Hz.	-	1	-
√		9526.0824	Elec. Comp. Set-Compressor-208 V.-50 Hz.	-	1	-
	22	9505.1371	Compressor-UL-BCF/BCM-110-208-240 V-60 Hz.	-	-	1
	22	9503.6117	Compressor-Int'l.-BCF/BCM-110-400 V-50 Hz.	-	-	1
	23	9503.3007	Condensate Evaporator-UL	1	1	-
√	24*	9503.7966	Heater Cartridge (Condensation Evap.)	1	1	-
	25	9503.2058	Sight Glass - BCF-24	1	-	-
	25	9503.2066	Sight Glass - BCF-65	-	1	1
	25	9500.8785	Sight Glass - BCF-24 - Int'l.	1	-	-
	25	9500.8777	Sight Glass - BCF-65 - Int'l.	-	1	1
	26	9504.0250	Valve - Rotolock	1	1	1
√	*	9503.7818	High Pressure Controller, BCF/BCM-110	-	-	1
√	*	9503.6174	Thermal Overload Relay, BCF/BCM-110	-	-	1

√ recommended parts/* not shown

NOTICE

The **Electric Component Sets** contain overload protector, start relay, run capacitor, and start capacitor.

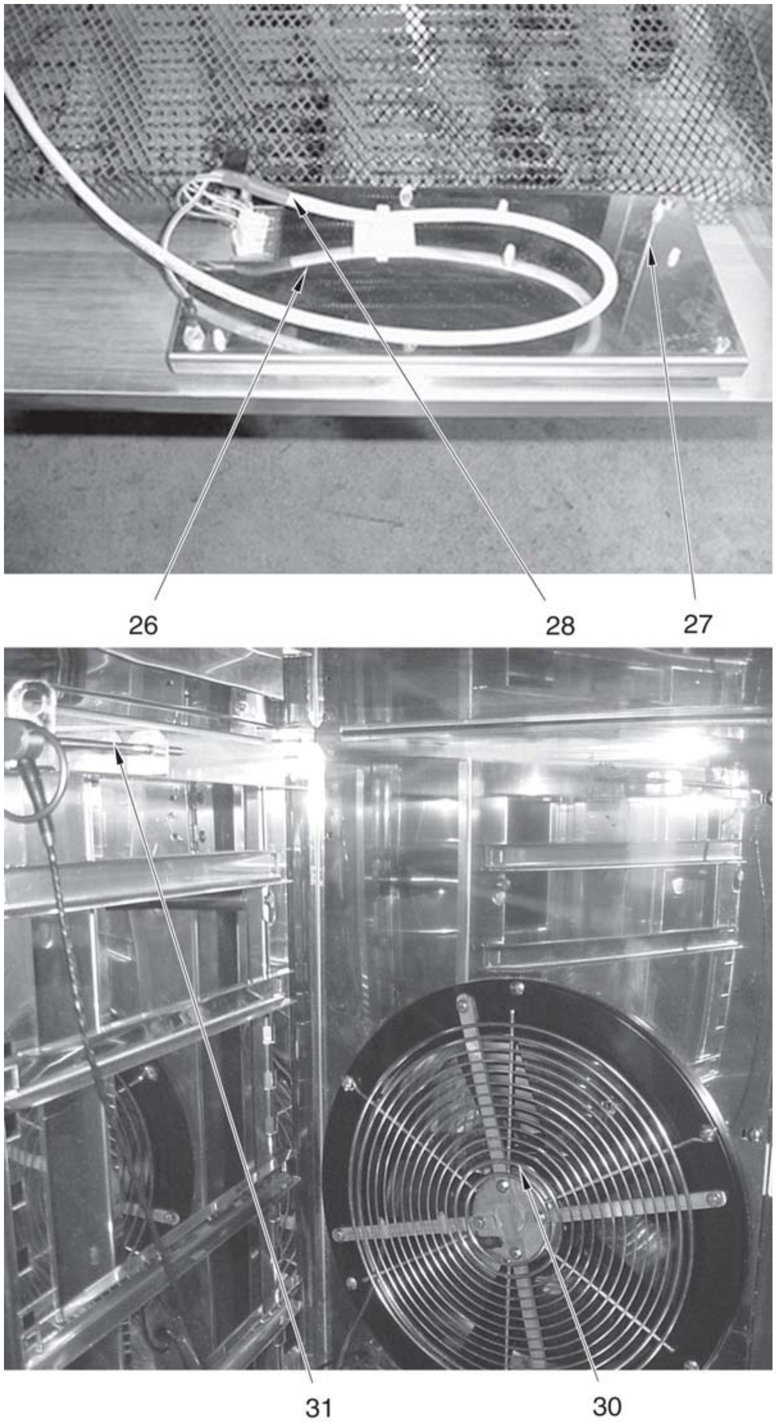


Figure 6. Display Board & Frigiprobe

Item No.	Part No.	Description	BCF-24	BCF-65	BCM-110 BCF-110
√ 26	9503.3692	Display Board	1	1	1
√ 27	9503.3700	Auxiliary Display Board	1	1	1
28	9503.3759	Connecting Cable	1	1	1
29*	9540.8613	Evap. Deflector-BCF-24 (before 7/99); BCF-65(before 10/99)	1	1	-
29*	9542.7076	Evap. Deflector-BCF-24 (7/99 & after); BCF-65(10/99 & after)	1	1	1
30	9505.3989	Evap. Fan Grid - UL-BCF-24	1	-	-
30	9505.3963	Evap. Fan Grid - UL-BCF-65; BCF/BCM-110	-	1	2
√ 31	9502.0400	Frigiprobe	1	1	1

√ recommended parts/*not shown

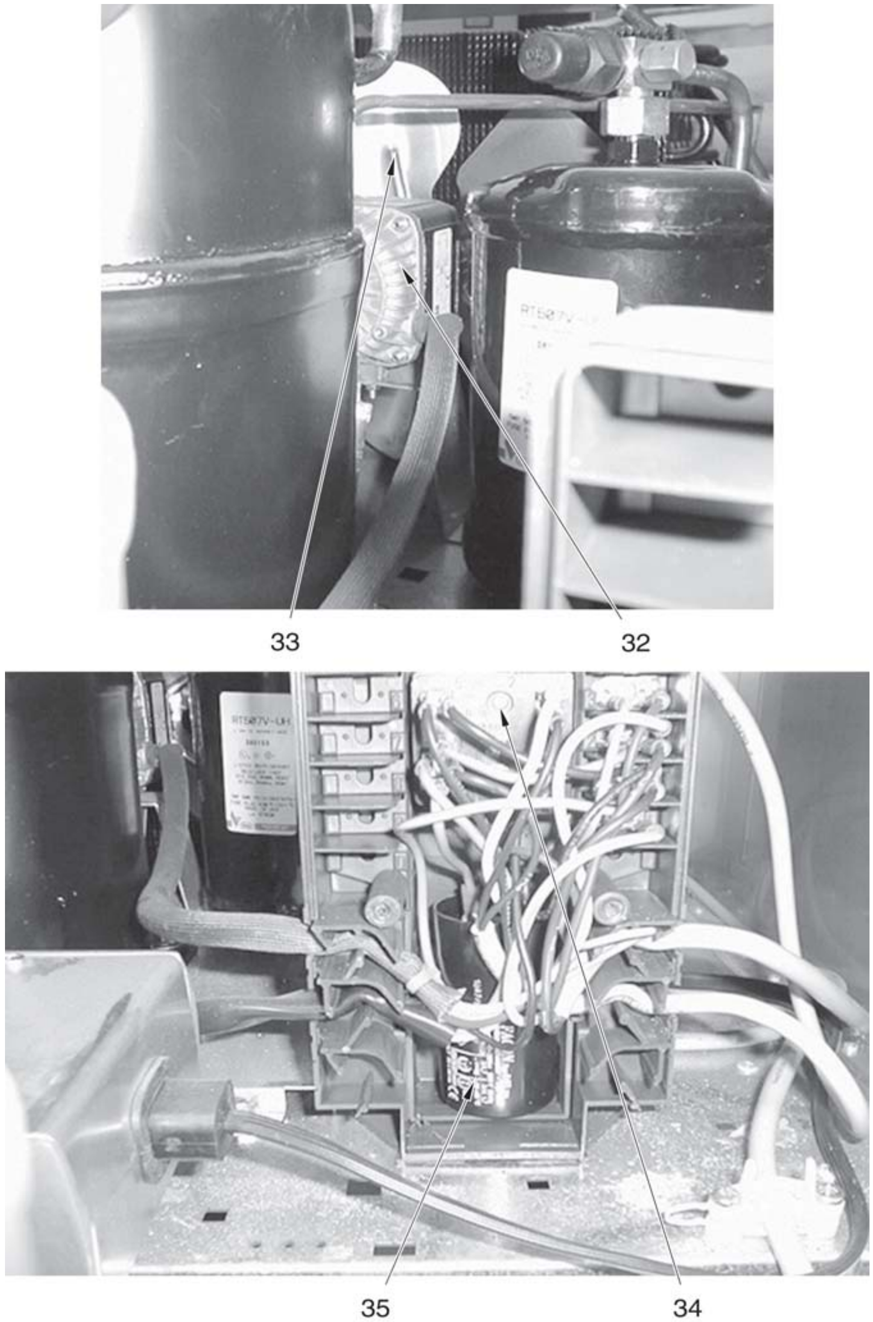


Figure 7. Motor & Fan Blade

	Item No.	Part No.	Description	BCF-24	BCF-65	BCM-110 BCF-110
√	32	9503.3304	Condenser Fan Motor-UL-BCF-24/65	1	1	-
√	32	9502.1846	Condenser Fan Motor-UL-BCF/BCM-110	-	-	1
√	32	9502.7561	Condenser Fan Motor - Int'l. - BCF-24	1	-	-
√	32	9503.4112	Condenser Fan Motor-Int'l. - BCF-65	-	1	-
√	32	9503.9343	Condenser Fan Motor-Int'l. - BCF/BCM-110	-	-	1
	33	9503.3312	Fan Blade - Condenser-BCF-24 - UL	1	-	-
	33	9503.9627	Fan Blade - Condenser-BCF/BCM-110-UL	-	-	1
	34	-----------	Start Relay (use Elec. Component Set-page 3-6)	1	1	-
	35	-----------	Start Capacitor (use Elec. Component Set-page 3-6)	1	1	-

√ recommended parts

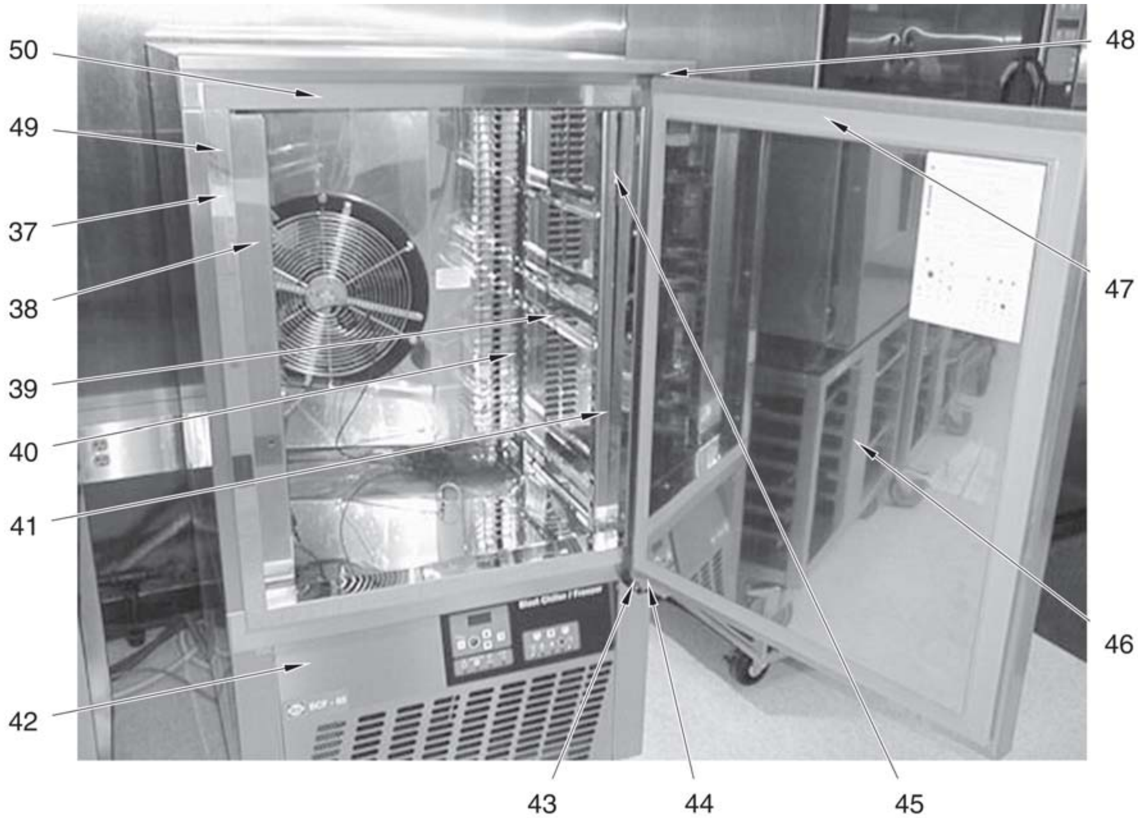


Figure 8. Heaters & Racks

Item No.	Part No.	Description	BCF-24	BCF-65	BCM-110 BCF-110
37	9526.0501	Front Frame Heater-BCF-24-UL (before 7/99)	1	-	-
37	9503.1084	Front Frame Heater-BCF-24-UL (7/99 & after)	1	-	-
37	9526.0493	Front Frame Heater-BCF-65-UL (before 10/99)	-	1	-
37	9503.1076	Front Frame Heater-BCF-65-UL (10/99 & after)	-	1	-
37	9503.7735	Front Frame Heater-BCF/BCM-110-UL	-	-	1
37	9526.0709	Front Frame Heater-BCF-24-Int'l. (before 7/99)	1	-	-
37	9502.0061	Front Frame Heater-BCF-24-Int'l. (7/99 & after)	1	-	-
37	9526.0717	Front Frame Heater-BCF-65-Int'l. (before 10/99)	-	1	-
37	9501.5616	Front Frame Heater-BCF-65-Int'l. (10/99 & after)	-	1	-
37	9503.7073	Front Frame Heater-BCF/BCM-110-Int'l.	-	-	1
38	9542.2184	Left, Front Vertical Rack-BCF-24 (before 7/99)	1	-	-
38	9542.5153	Left, Front Vertical Rack-BCF-24 (7/99 & after)	1	-	-
38	9541.9966	Left, Front Vertical Rack - BCF-65 (before 10/99)	-	1	-
38	9542.6854	Left, Front Vertical Rack - BCF-65 (10/99 & after)	-	1	-
38	9542.5617	Left, Front Vertical Rack - BCF-110	-	-	1
39	9511.8832	Right Shelf Support	3	6	10
39*	9511.8840	Left Shelf Support	3	6	10
40	9542.2267	Right Rear Vertical Rack - BCF-24 (before 7/99)	1	-	-
40	9542.6144	Right Rear Vertical Rack - BCF-24 (7/99 & after)	1	-	-
40	9542.2242	Right Rear Vertical Rack - BCF-65 (before 10/99)	-	1	-
40	9542.6888	Right Rear Vertical Rack - BCF-65 (10/99 & after)	-	1	-
40	9542.6169	Right Rear Vertical Rack - BCF-110	-	-	1

*not shown

(Continued)

Item No.	Part No.	Description	BCF-24	BCF-65	BCM-110 BCF-110
40*	9542.2259	Left Rear Vertical Rack-BCF-24 (before 7/99)	1	-	-
40*	9542.5161	Left Rear Vertical Rack-BCF-24 (7/99 & after)	1	-	-
40*	9542.2234	Left Rear Vertical Rack-BCF-65 (before 10/99)	-	1	-
40*	9542.6870	Left Rear Vertical Rack-BCF-65 (10/99 & after)	-	1	-
40*	9542.5625	Left Rear Vertical Rack-BCF-110	-	-	1
41	9542.2192	Right Front Vertical Rack-BCF-24 (before 7/99)	1	-	-
41	9542.6136	Right Front Vertical Rack-BCF-24 (7/99 & after)	1	-	-
41	9541.9982	Right Front Vertical Rack-BCF-65 (before 10/99)	-	1	-
41	9542.6862	Right Front Vertical Rack-BCF-65 (10/99 & after)	-	1	-
41	9542.6151	Right Front Vertical Rack-BCF-110	-	-	1
42	9540.9496	Front Panel - BCF-24 (before Jan. 2000)	1	-	-
42	9543.2183	Front Panel - BCF-24 (Jan. 2000 to Dec. 2004)	1	-	-
42	9543.4781	Front Panel(w/power switch)-BCF-24 (Jan. 2005 and after)	1	-	-
42	9540.9504	Front Panel - BCF-65 (before Jan. 2000)	-	1	-
42	9543.2365	Front Panel - BCF-65 (Jan. 2000 to Dec. 2004)	-	1	-
42	9543.4780	Front Panel(w/power switch)-BCF-65 (Jan. 2005 and after)	-	1	-
42	9542.7720	Front Panel - BCF/BCM-110 (before Dec. 2004)	-	-	1
42	9543.4780	Front Panel(w/power switch)-BCF/BCM-110 (Jan. 2005 and after)	-	-	1
43	9501.8875	Bottom Pivot - Door Hinge	1	1	1
44	9501.4601	Return Pivot - Door Hinge	1	1	1
45	9503.3296	Pins-Vertical Rack Holding-BCF-65 (before 10/99) -BCF-24 (before 7/99)	8	8	-
45	9505.4664	Pins-Right Front Vertical Holding-BCF-24 (7/99 & after) -BCF-65 (10/99 & after)	2	2	2
45	9505.4672	Pins-Left Front Vertical Holding-BCF-24 (7/99 & after) -BCF-65 (10/99 & after)	2	2	2
45	9505.4474	Pins-Right Rear Vertical Holding-BCF-24 (7/99 & after) -BCF-65 (10/99 & after)	2	2	2
45	9505.4482	Pins-Left Rear Vertical Holding-BCF-24 (7/99 & after) -BCF-65 (10/99 & after)	2	2	2
46	9550.0724	Door - BCF-24 (before 7/99)	1	-	-
46	9518.2051	Door - BCF-24 (7/99 & after)	1	-	-
46	9550.0732	Door - BCF-65 (before 10/99)	-	1	-
46	9518.2069	Door - BCF-65 (10/99 & after)	-	1	-
46	9518.2077	Door - BCF/BCM-110	-	-	1
47	9502.1713	Door Seal - BCF-24 (before 7/99)	1	-	-
47	9505.4425	Door Seal - BCF-24 (7/99 & after)	1	-	-
47	9502.1721	Door Seal - BCF-65 (before 10/99)	-	1	-
47	9505.4433	Door Seal - BCF-65 (10/99 & after)	-	1	-
47	9505.4441	Door Seal - BCF/BCM-110	-	-	1
48	9505.4524	Top Pivot - Door Hinge	1	1	1
49	9540.2376	Side Front Frame - Door BCF-24 (before 7/99)	2	-	-
49	9540.2384	Side Front Frame - Door BCF-65 (before 10/99)	-	2	-
49	9542.8926	Right Side Front Frame - Door-BCF-24 (7/99 & after)	1	-	-
49	9542.8934	Right Side Front Frame - Door-BCF-65 (10/99 & after)	-	1	-
49	9542.8942	Right Side Front Frame - Door - BCF/BCM-110	-	-	1
49	9542.8967	Left Side Front Frame - Door-BCF-24 (7/99 & after)	1	-	-
49	9542.8975	Left Side Front Frame - Door-BCF-65 (10/99 & after)	-	1	-
49	9542.8983	Left Side Front Frame - Door-BCF/BCM-110	-	-	1

* not shown

(Continued)

Item No.	Part No.	Description	BCF-24	BCF-65	BCM-110 BCF-110
50	9540.2368	Top/Bottom Front Frame-Door-BCF-24 (before 7/99) Door-BCF-65 (before 10/99)	2	2	-
50	9542.8900	Top Front Frame-Door-BCF-24 (7/99 & after) BCF/BCM-110;BCF-65 (10/99 & after)	1	1	1
50	9542.8918	Bottom Front Frame-Door-BCF-24 (7/99 & after) BCF/BCM-110;BCF-65 (10/99 & after)	1	1	1
	9503.3635*	Decal-Door Handle-BCF-24	1	-	-
	9503.3627*	Decal-Door Handle-BCF-65;BCF/BCM-110	-	1	1
	9543.6198*	MOR Support - BCM-110	-	-	1
	03201*	Printer Mounting Bracket Accessory	1	1	1
	9526.0568*	Set Screws	AR	AR	AR
√	9504.0128*	Power Switch	1	1	1

√ recommended parts
* not shown